

Split

Work Order ID 119130

\*119130\*

Page 1

May-09-14 11:28:09 AM

Item ID: D2893-1

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Support

Start Date: 5/09/14 Start Qty: 20.00

\*20\*

Cust Item ID:

Required Date: 5/09/14 Req'd Qty: 20.00

\*20\*

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 1405-09 Tooling:

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2893

C

100

\*100\*

HAAS 1

HAAS CNC vertical machine #1

HAAS CNC VERTICAL MACHINING #1

Memo

1-Machine as per Folio FA081  
2-Debur

0.00

DAS  
14  
9-89

14/05/24

16

DAS  
20  
9-89

14-05-22

110

\*110\*

QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

Memo

0.00

DAS  
14  
9-89

14/05/24

16

DAS  
20  
9-89

14-05-22

120

\*120\*

QC

Quality Control

QC8- Inspect parts - second check

Memo

0.00

16

JFL 2014-05-28

# Work Order ID 119130

May-09-14 11:28:09 AM

\*119130\*

Page 2

Item ID: D2893-1 Accept \*N9000040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Support  
 Start Date: 5/09/14 Start Qty: 20.00 \*20\* Cust Item ID:  
 Required Date: 5/09/14 Req'd Qty: 20.00 \*20\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* HandFXtube	Memo Per note 8 on page 1 of dwg D2893, Prep inner concave surface of support and apply 3M Scotch-Weld as per dwg. 24h of cure time.	0.00				16	Ø	Ø	14-5-28
140 *140* QC Quality Control	QC3- Inspect Part Finish  Memo	0.00 0.00		DAS 27 9-89 14/5/29		16			
170 *170* Packaging Packaging	Identify as per dwg & Stock Location: <u>L6052</u>  Memo	0.00 0.00				16	Ø	Ø	CA 14-05-29



# Work Order ID 119130

May-09-14 11:28:09 AM

**\*119130\***

Page 3

Item ID:	D2893-1	Accept	<b>*N900040100*</b>	Setup	Start	<b>*NS1*</b>
Revision ID:					Stop	<b>*NS2*</b>
Item Name:	Support					
Start Date:	5/09/14	Start Qty: 20.00	<b>*20*</b>	Cust Item ID:		
Required Date:	5/09/14	Req'd Qty: 20.00	<b>*20*</b>	Customer:		
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	<b>*NR1*</b>
	QC:	Date:	SPC (Y/N):	Date:		Stop	<b>*NR2*</b>

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	QC21- Final Inspection - Work Order Release	0.00							
<b>*180*</b>									
QC	Memo	0.00							
Quality Control									

*MLJ 1405-29*

*MLJ 1405-29*

# Picklist Print

May-09-14 11:28:12 AM

Page 1

Work Order ID: 119130

**\*119130\***

Parent Item: D2893-1

**\*D2893-1\***

Parent Item Name: Support

Start Date: 5/09/14

Required Date: 5/09/14

Start Qty: 20.00

Required Qty: 20.00

## Comments:

IPP: C02.11.26Reformat; Added P/OKJ  
 IPP D 06.04.19 removed alodine EC  
 IPP Rev:E Added priming as per Rev B 07-04-30 JLM  
 IPP F 08.03.19 Re-format EC verified by: DD  
 IPP Rev:G 08-05-15 add QC14 DD verified by:EC  
 11.08.04 as per dwg rev.C DD verf:EC

IPP Rev:H

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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DSK078

Manufactured No

100

Each

12.0000

0.5

11

**\*\***

10

DAS  
20  
9-89

14-05-22

**\*DSK078\***

D2893-1 Turning Detail

## Location

## Loc Qty

## Loc Code

MAT060

12

111540

1

111712

1

115273

10

10



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 119130
<b>Description:</b> Ø2.750 Support		<b>Part Number:</b> D2893-1
<b>Inspection Dwg:</b> D2893	<b>Rev:</b> C	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION DIMENSION SHEET

FIRST ARTICLE INSPECTION SHEET								
				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	5
HAAS Section								
AA	2.985	3.005		2.985	3.000	2.995	2.995	2.995
AB	0.440	0.460		.445	.441	.441	.442	.441
AC	0.125	0.160		.128	.130	.128	.128	.128
AD	0.040	0.060		.049	.048	.048	.049	.049
AE	0.188	0.193		.188	.188	.188	.188	.188
AF	0.125	0.160		.133	.138	.138	.138	.138
AG	0.140	0.160		.153	.149	.152	.151	.151
AH	1.360	1.400		1.370	1.368	1.371	1.371	1.371
AI	0.040	0.060		.055	.048	.051	.051	.051
AJ	1.190	1.230		1.217	1.214	1.214	1.212	1.215
AK	0.010	0.020		.010	.010	.010	.010	.010
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.528	2.528	2.528	2.528	2.528
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.261	.261	.261	.261	.261
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

Accept/Reject

DAS  
20  
9-80

Measured by:

Date: 14-05-23 14/05/24

Audited by: JFC 2014-05-28

Date: 2014-05-28

Preliminary Approval:

Date:

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	
D	12.07.31	Dwg Rev updated	KJ	



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 119130
<b>Description:</b> Ø2.750 Support		<b>Part Number:</b> D2893-1
<b>Inspection Dwg:</b> D2893	<b>Rev:</b> C	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	16	17	18	19	20
HAAS Section								
AA	2.985	3.005		2.997	2.997	2.997	2.995	2.995
AB	0.440	0.460		.440	.440	.440	.440	.440
AC	0.125	0.160		.130	.128	.130	.130	.130
AD	0.040	0.060		.047	.053	.052	.049	.049
AE	0.188	0.193		.188	.188	.188	.188	.188
AF	0.125	0.160		.134	.136	.134	.134	.134
AG	0.140	0.160		.153	.152	.151	.152	.151
AH	1.360	1.400		1.370	1.368	1.370	1.370	1.370
AI	0.040	0.060		.051	.048	.051	.050	.049
AJ	1.190	1.230		1.215	1.212	1.212	1.212	1.212
AK	0.010	0.020		.010	.010	.010	.010	.010
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.528	2.528	2.520	2.528	2.530
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.261	.261	.261	.261	.261
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
Accept/Reject								

<b>Measured by:</b> <i>OML</i>	<b>Date:</b> 14/05/24
<b>Audited by:</b> <i>JFC</i>	<b>Date:</b> 2014-05-28
<b>Preliminary Approval:</b>	<b>Date:</b>

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
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D	12.07.31	Dwg Rev updated	KJ	<i>[Signature]</i>



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	119130
<b>Description:</b> Ø2.750 Support		<b>Part Number:</b>	D2893-1
<b>Inspection Dwg:</b> D2893	<b>Rev:</b> C	<b>Page 1 of 1</b>	

### FIRST ARTICLE INSPECTION DIMENSION SHEET

				Record Actual Dimensions				
Dim	Min	Max	Go/No Go Gauge	11	12	13	14	15
HAAS Section								
AA	2.985	3.005		2.994	2.994	2.994	2.994	2.998
AB	0.440	0.460		.440	.440	.440	.440	.440
AC	0.125	0.160		.125	.130	.130	.130	.130
AD	0.040	0.060		.050	.050	.050	.050	.050
AE	0.188	0.193		.188	.188	.188	.188	.188
AF	0.125	0.160		.134	.134	.134	.134	.134
AG	0.140	0.160		.152	.150	.152	.154	.151
AH	1.360	1.400		1.370	1.373	1.373	1.376	1.373
AI	0.040	0.060		.050	.051	.051	.050	.049
AJ	1.190	1.230		1.217	1.214	1.214	1.220	1.218
AK	0.010	0.020		.010	.010	.010	.010	.010
AL	0.053	0.073		.063	.063	.063	.063	.063
AM	0.240	0.260		.250	.250	.250	.250	.250
AN	2.518	2.538		2.530	2.530	2.530	2.530	2.530
AO	84.39	90.39		87.39	87.39	87.39	87.39	87.39
AP	0.261	0.266		.261	.261	.261	.261	.261
AQ	0.053	0.073		.063	.063	.063	.063	.063
AR								
AS								
AT								
DAS Accept/Reject								

<b>Measured by:</b>	DAS 14 9-89	<b>Date:</b>	14/05/26
<b>Audited by:</b>	JR	<b>Date:</b>	2014-05-28
<b>Preliminary Approval:</b>		<b>Date:</b>	

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
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				1	2	3	4	5
<b>HAAS Section</b>								
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AB	0.440	0.460		.440				
AC	0.125	0.160		.130				
AD	0.040	0.060		.050				
AE	0.188	0.193		.188				
AF	0.125	0.160		.134				
AG	0.140	0.160		.152				
AH	1.360	1.400		1.373				
AI	0.040	0.060		.051				
AJ	1.190	1.230		1.215				
AK	0.010	0.020		.010				
AL	0.053	0.073		.063				
AM	0.240	0.260		.250				
AN	2.518	2.538		2.530				
AO	84.39	90.39		87.39				
AP	0.261	0.266		.261				
AQ	0.053	0.073		.063				
AR								
AS								
AT								
<b>Accept/Reject</b>								

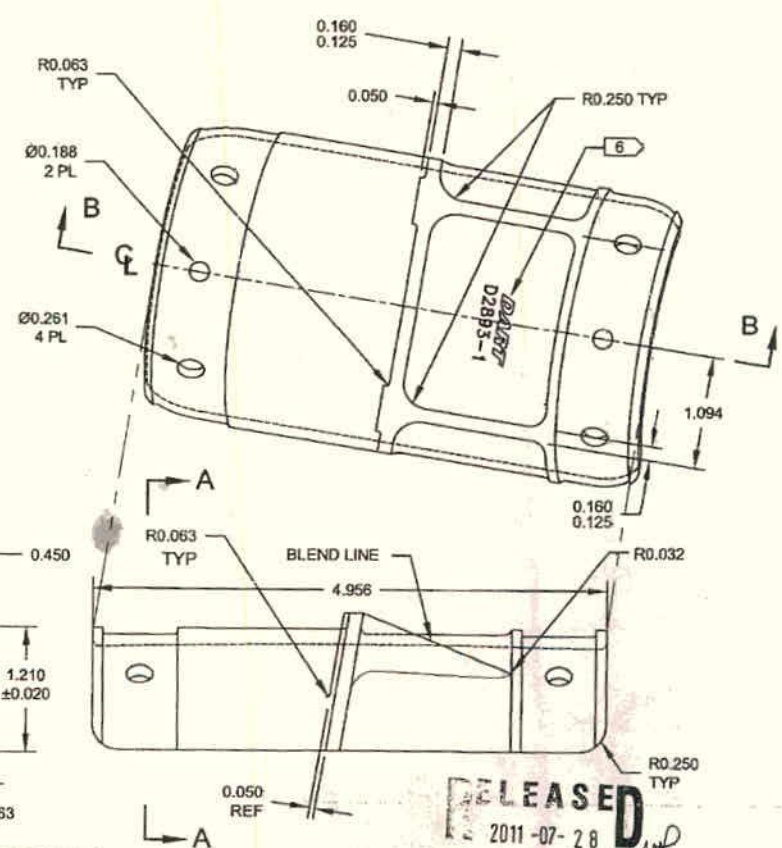
**Measured by:** *mf* **Date:** 14/05/26

**Audited by:** *JK* **Date:** 2014-05-28

**Preliminary Approval:** **Date:**

Rev	Date	Change	Revised by	Approved
A	02.12.13	New Issue	KJ/RF	
B	07.05.08	Dimension AP revised	KJ/JLM	
C	08.04.21	Reformat	KJ/JLM	
D	12.07.31	Dwg Rev updated	KJ	<i>[Signature]</i>





## NOTES

- 1) MATERIAL: 17-4 PH STAINLESS STEEL, H900 OR H925 CONDITION  
MIN UTS = 170 KSI (38 HRC)  
(REF DART SPEC. D6104)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 (REF X.XXX =  $\pm 0.010$ ) UNLESS  
OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: DART LOGO (PER DART SUPPLIED GRAPHIC) AND PART  
NUMBER IN THIS AREA WITH 0.125 HIGH LETTERING  
0.010-0.020 DEEP, PER DART QSI 044 6.3.
- 7) WEIGHT: 0.78 lb
- 8) FOR THE ENTIRE INNER CONCAVE SURFACE:  
ABRADE SURFACE WITH 400-GRIT SANDPAPER. REMOVE RESIDUE WITH MEK  
(OR EQUIVALENT). APPLY 0.03" TO 0.05" THICK LAYER OF 3M SCOTCH-VELD 2216 B/A  
ADHESIVE TO MATING SURFACE OF SUPPORT. ALLOW TO CURE FOR 24 HOURS.

D2893-1 SUPPORT

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT

WITHOUT NOTICE  
4  
WORK ORDER  
NO. 119130 HWS

14-05-09

RELEASED  
2011-07-28

C	RMV FINISH, ADD 3M 2216, ADD H225 MATL OPTION	CP	11.07.15
B	UPDATE DIMS AS MFG, PRIME INSIDE	PH	07.03.16
A	NEW ISSUE	CP	01.01.10
REV.	DESCRIPTION	BY	DATE
DESIGN		<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D2893	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		Ø2.750 SUPPORT	NTS
DATE	11.07.15	COPYRIGHT © 2009 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRELIMINARY AND CONFIDENTIAL AND IS SUPPLIED UNDER THE CONFIDENTIALITY AGREEMENT THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR FOR DISCLOSURE TO ANY OTHER PERSON OR ENTITY WITHOUT PERMISSION FROM DART AEROSPACE LTD.</small>	